

***NATIONAL WEATHER SERVICE POLICY DIRECTIVE 80-6
APRIL 8, 2004***

Science and Technology

RESEARCH AND ANALYSIS FOR IMPROVING OPERATIONS AND SERVICES

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OPR: W/OST12 (P. Hirschberg)

Certified by: W/OST (J. Hayes)

Type of Issuance: Initial

SUMMARY OF REVISIONS: None.

1. Facilitating research and conducting operational analyses on alternative solutions for validated operational requirements are essential for the accomplishment of the National Oceanic Atmospheric Administration's National Weather Service (NWS) mission. This directive establishes the NWS policy for research and analysis to support operations and services improvement.
2. The objective of this directive is to establish the organizational, management, and procedural framework to identify cost-effective science and technology solutions for validated operational requirements, and plan for developing and implementing selected solutions. The output from the research and analysis phase will be requirements specifications, business cases, and operational development plans.
3. This directive establishes the following authorities and responsibilities:
 - 3.1 The Office of Science and Technology (W/OST) and the Office of Hydrologic Development (W/OHD) will:
 - a. Establish national policies and procedures and lead the effort to coordinate and prioritize research and analysis activities consistent with policy directive NWSPD 10-1, Operations And Services Improvement Process.
 - b. Lead the effort to coordinate development of business cases, program and functional requirements, and operational development plans for the operational development phase as defined in the NWSPD 10-1.
 - 3.2 The Office of Climate, Water, and Weather Services, the Office of Operational Systems, the Office of the Chief Information Officer, the National Centers for Environmental Prediction, and the Regions will:

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- a. Coordinate with W/OST and W/OHD, as appropriate, in developing business cases, program and functional requirements, and operational development plans.
 - b. Coordinate with W/OST and W/OHD, as appropriate, to evaluate input, prioritize efforts, define resources, and distribute information to appropriate parties.
4. Performance Measure: W/OST and W/OHD, as appropriate, will track the timeliness of the research and analysis activities.
5. This policy directive is supported by the references and glossary of terms listed in Attachment 1.

Signed by March 25, 2004
Brigadier General David L. Johnson, USAF (Ret.) Date
Assistant Administrator for Weather Services

Attachment 1

REFERENCES AND GLOSSARY OF TERMS

References

NWS Policy Directive 10-1, *Operations and Services Improvement Process*
NWS Policy Directive 10-30, *User Needs and Scientific/Technologic Opportunities*
NWS Policy Directive 10-31, *Operational Requirements Validation*
NWS Policy Directive 30-1, *Systems Deployment, Maintenance, and Assessment*
NWS Policy Directive 80-1, *Acquisition Program Management*
NWS Policy Directive 80-3, *Systems Engineering*
NWS Policy Directive 80-4, *Science and Technology Planning and Programming*
NWS Policy Directive 80-5, *Science Review and Approval*
NWS Policy Directive 80-8, *Development For Improving Operations and Services*

Glossary

Analysis. The process by which potential operational solutions to a statement of need (SON) are analyzed.

Business Case. A document that describes the justification and analysis for selecting a solution including performance expectation and cost-benefit analysis.

Functional Requirements. A statement that identifies what a product or process must accomplish to produce required behavior and/or results. Qualitative requirements describing what the system needs to do without describing them in quantitative terms. These requirements are usually descriptive and are verified by the summation of the associated performance requirements.

Operational Development. The process by which a solution is acquired and engineered into NWS operations.

Operational Development Roadmap. An initial plan outlining roles, responsibilities, schedules, milestones, success and performance criteria, and resource needs for operational development to support operations and services.

Operational Requirements. A validated capability meeting an operational need.

Operations and Services Improvement Process. A process described in NWSPD 10-1 to ensure an integrated effort to improve NWS operations and services.

Program Requirements. Developed from the SON detailing the technical requirements for the

approved program or acquisition.

Solution. A new or improved technique, technology, or process meeting a deficiency as defined in a SON.

Validation. The process by which a user need or opportunity is approved as a NWS requirement.